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- (71) Applicant (for all designated States except US): **NOVO NORDISK A/S** [DK/DK]; Novo Allé, DK-2880 Bagsværd (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LAU, Jesper** [DK/DK]; Rosenvænget 3, DK-3520 Farum (DK). **HANSEN, Thomas Kruse** [DK/DK]; Tibbevangen 78, DK-2730 Herlev (DK). **MADSEN, Kjeld** [DK/DK]; Nyvestergårdsvej 3, DK-3500 Værløse (DK). **BLOCH, Paw** [DK/DK]; Solbærhøget 2, DK-2630 Taastrup (DK). **DÖRWALD, Florencio Zaragoza** [DE/DK]; Nøddelunden 22, DK-2765 Smørum (DK). **JOHANSEN, Nils Langeland** [DK/DK]; Niels W. Gadesgade 45, DK-2100 København Ø (DK).
- (74) Common Representative: **NOVO NORDISK A/S**; Corporate Patents, Novo Allé, DK-2880 Bagsværd (DK).
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(54) Title: ALBUMIN-BINDING DERIVATIVES OF THERAPEUTIC PEPTIDES

(57) Abstract: Novel polypeptide derivatives having protracted profile of action. The present invention relates to a compound which comprises a therapeutic polypeptide linked to an albumin binding residue via a hydrophilic spacer. The present invention also relates to a compound which comprises a therapeutic polypeptide linked to an albumin binding residue via a hydrophilic spacer that separates the polypeptide and the albumin binding residue with a chemical moiety comprising at least 5 non-hydrogen atoms where 30-50% of these atoms are either N or O. In one embodiment of this invention the spacer is defined as $-(CH_2)_D[(CH_2)_nE]_m(CH_2)_pQ_q-$, wherein l, m and n independently are 1-20 and p is 0-10, Q is $-Z-(CH_2)_lD[(CH_2)_nG]_m(CH_2)_p-$, q is an integer in the range from 0 to 5, each D, E and G independently are selected from $-O-$, NR^3- , $-N(COR^4)-$, $-PR^5(O)-$, and $-P(OR^6)(O)-$, wherein R^3 , R^4 , R^5 , and R^6 independently represent hydrogen or C_{1-6} -alkyl, Z is selected from $-C(O)NH-$, $-C(O)NHCH_2-$, $-OC(O)NH-$, $-C(O)NHCH_2CH_2-$, $-C(O)CH_2-$, $-C(O)CH=CH-$, $-(CH_2)_s-$, $-C(O)-$, $-C(O)O-$ or $-NHC(O)-$, wherein s is 0 or 1.